

# Mineral Industry Surveys

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## IRON ORE IN OCTOBER 2005

U.S. mine production of iron ore in October 2005, on a daily average basis, was 3% less than that of the prior month, according to the U.S. Geological Survey. Average daily production was 144,000 metric tons per day (t/d), 4,300 t/d less than the figure for September 2005.

Shipments in October 2005, on an average daily basis, were 2% less than those of September 2005. Mine stocks at the end of October were 717,000 metric tons (t) less than the corresponding stocks figure on September 30, about an 11% decrease.

U.S. exports of iron ore in September 2005 were almost 3% greater than imports, with exports exceeding imports by 30,000 metric tons (t). Although U.S. imports of iron ore increased 26% from those of August 2005, the Port of New Orleans, which had averaged almost 0.5 million metric tons (Mt) of iron ore per month for the first 7 months of 2005, had a tonnage drop to 13,000 t in August, with hurricane activity in the Gulf of Mexico, and to zero in September owing to damages sustained at the port (See Iron Ore in August 2005.).

**Price Update.**—The rise in Chinese imports in 2005, continued tight supply, and world spot prices for iron ore—almost 50% higher per ton than the price in current annual contracts—are suggesting that benchmark iron ore prices will rise again in 2006. Counterbalancing these upward market forces is short-term overcapacity in Chinese steelmaking and falling Chinese steel product prices. An additional factor to be considered in the pricing mix is BHP Billiton Limited's continued interest in having iron ore prices reflect a transport premium for the cost to the purchaser of iron ore delivered at the steel plant (Tan, 2005<sup>1</sup>; Wilson, 2005<sup>§</sup>; Xinhua online, 2005<sup>§</sup>).

**Mergers and Acquisitions.**—On November 23, Luxembourg's Arcelor S.A. launched an unsolicited bid worth \$3.7 billion to obtain majority ownership of Dofasco Inc. Dofasco owns 28.6% of Wabush Mines and 100% of Quebec Cartier Mining (QCM), both Canadian iron ore producers.

QCM produced 13.6 Mt of iron ore pellets and concentrates in 2004, of which only 3.7 Mt is needed by Dofasco to produce steel (Markham and others, 2005).

In October, The Netherlands' Mittal Steel Company N.V., the world's leading steel producer, acquired a 93% stake in Ukrainian-based steel producer Kryvorizhstal for about \$4.8 billion. In a previously annulled privatization agreement, Kryvorizhstal had been purchased in 2004 by Investment Metallurgical Union at one-sixth the price later paid by Mittal in 2005. In 2004, Kryvorizhstal produced 7.0 Mt of crude steel, 6.0 Mt of rolled steel products, and 15.5 Mt of iron ore (Mining Journal, 2005; Ritchie, 2005b).

The purchase of Kryvorizhstal is just one step in Mittal's overall goal of becoming more than 80% self-sufficient in iron ore by 2010. It is anticipated that Mittal will add more than 28 million metric tons per year of iron ore production capacity upon completion of all current projects (Ritchie, 2005a).

## References Cited

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Mining Journal, 2005, Mittal buys Ukrainian steel maker: *Mining Journal*, October 28, p. 7.  
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Xinhua online, 2005 (November 29), Govt interested in iron ore pricing, accessed December 14, 2005, at URL [http://news.xinhuanet.com/english/2005-11/29/content\\_3850541.htm](http://news.xinhuanet.com/english/2005-11/29/content_3850541.htm).

<sup>1</sup>References that include a section mark (§) are found in the Internet References Cited section.

TABLE 1  
U.S. PRODUCTION AND SHIPMENTS OF IRON ORE<sup>1,2</sup>  
(Exclusive of ore containing 5% or more of manganese)

(Thousand metric tons)

Period	Production		Shipments	
	Monthly	Year to date	Monthly	Year to date
2004:				
October	5,110	45,500	4,780	45,700
November	4,730	50,200	5,110	50,800
December	4,450	54,700	5,150	55,900
2005:				
January	4,420	4,420	3,350	3,350
February	3,870	8,290	1,150	4,500
March	4,240	12,500	2,610	7,110
April	4,220	16,800	4,940	12,100
May	5,250	22,000	5,210	17,300
June	4,480	26,500	4,840	22,100
July	5,160	31,600	5,110	27,200
August	4,840	36,500	5,020	32,200
September	4,460	40,900	5,150	37,400
October	4,480	45,400	5,190	42,600

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>Excludes byproduct ores.

TABLE 2  
U.S. PRODUCTION, SHIPMENTS, AND STOCKS OF IRON ORE IN OCTOBER<sup>1,2</sup>

(Thousand metric tons)

State	Production		Shipments <sup>3</sup>		Stocks <sup>4</sup>	
	2005	2004	2005	2004	2005	2004
Michigan	1,130	1,400	1,230	1,100	1,630	1,620
Minnesota	3,340	3,710	3,960	3,680	4,210	2,240
Total	4,480	5,110	5,190	4,780	5,840	3,850

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Excludes byproduct ore.

<sup>3</sup>Includes rail and vessel.

<sup>4</sup>Includes mines, plants, and loading docks.

TABLE 3  
CANADA: SHIPMENTS OF IRON ORE<sup>1,2</sup>

(Thousand dry metric tons)

Period	Newfoundland and Labrador	Quebec	British Columbia	Total
2004:				
September	124	1,220	5	1,350
October	635	1,570	7	2,210
November	1,390	958	10	2,360
December	1,370	944	9	2,330
Year total	14,900	13,200	87	28,300
2005:				
January	1,210	1,070	8	2,280
February	928	748	8	1,680
March	1,160	873	10	2,040
April	1,690	967	7	2,660
May	1,940	588	10	2,540
June	1,620 <sup>r</sup>	399	8	2,030 <sup>r</sup>
July	1,500 <sup>r</sup>	1,050	7	2,550 <sup>r</sup>
August	1,430 <sup>r</sup>	708	10	2,150 <sup>r</sup>
September	1,800	1,160	9	2,960

<sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes production from steel plant waste oxides.

Source: Natural Resources Canada.

TABLE 4  
PRODUCTION OF PIG IRON AND RAW STEEL IN THE UNITED STATES, BY TYPE OF FURNACE<sup>1</sup>

(Thousand metric tons)

Period	Pig iron production, blast furnace		Raw steel production			
	Monthly	Year to date	Basic oxygen furnace <sup>2</sup>		Electric furnace	
	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date
2004:						
September	3,400	30,600	3,020	33,500	5,370	40,400
October	3,570	34,200	3,030	36,600	5,630	46,100
November	2,140	36,300	5,520	42,100	2,580	48,600
December	4,270	40,600	3,810	45,900	4,390	53,000
2005:						
January	3,420	3,420	3,890	3,890	4,390	4,390
February	3,260	6,680	3,710	7,590	3,930	8,320
March	3,660	10,300	4,040	11,600	4,150	12,500
April	3,080	13,400	3,500	15,100	4,440	16,900
May	3,080	16,500	3,430	18,600	4,320	21,200
June	2,690	19,200	3,000	21,600	4,110	25,300
July	2,630	21,800	2,920	24,500	4,210	29,500
August	2,890	24,700	3,180	27,700	4,370	33,900
September	2,840	27,500	3,330	31,000	4,440	38,400

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Raw steel production figures for the basic oxygen process are usually greater than the corresponding pig iron production figures because scrap is routinely melted in the basic oxygen furnace together with the molten pig iron.

Source: American Iron and Steel Institute.

TABLE 5  
U.S. EXPORTS OF IRON ORE, BY COUNTRY OF DESTINATION AND TYPE<sup>1,2</sup>

(Thousand metric tons)

Country of destination and type of product	2005					
	2004	1st quarter	2nd quarter	July	August	September
Canada	7,830	1,280	4,300	999	984	1,030
China	297	--	1	1	107	88
Mexico	4	1	1	(3)	(3)	(3)
Slovakia	187	--	26	52	158	--
Trinidad and Tobago	29	--	(3)	--	--	--
Other	53	(3)	4	(3)	(3)	--
Total	8,400	1,280	4,330	1,050	1,250	1,120
Pellets	8,100	1,280	4,320	1,050	1,200	1,110
Concentrates	25	2	4	1	2	(3)
Direct shipping ores	264	(3)	4	1	48	3
Other	6	2	1	1	1	(3)
Total	8,400	1,280	4,330	1,050	1,250	1,120

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes agglomerates.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE, BY COUNTRY AND TYPE<sup>1,2</sup>  
(Exclusive of ore containing 20% or more manganese)

Country of origin and type of product	2005					2004
	September		Year to date			January-September
	Thousand metric tons	Value <sup>3</sup> (thousand dollars)	Thousand metric tons	Value <sup>3</sup> (thousand dollars)	Value <sup>3</sup> (dollars per ton)	Thousand metric tons
Australia	1	11	1	11	18.00	(4)
Bahamas, The	--	--	140	4,850	34.70	--
Brazil	245	9,020	3,130	128,000	40.76	3,700
Canada	818	35,300	5,140	197,000	38.24	4,240
Chile	--	--	221	8,471	38.34	107
China	--	--	(4)	2	263.13	--
Finland	3	117	9	383	41.03	8
Greece	--	--	13	243	18.80	--
Mexico	3	65	37	1,510	40.83	49
Norway	--	--	3	96	36.60	--
Paraguay	--	--	4	68	16.80	--
Peru	--	--	32	1,020	32.01	32
Russia	--	--	99	8,550	86.00 <sup>5</sup>	--
South Africa	--	--	--	--	--	104
Spain	--	--	1	25	18.00	(4)
Sweden	16	1,320	16	1,320	83.67	111
Trinidad and Tobago	--	--	375	11,000	29.45	--
Venezuela	--	--	148	7,890	53.43	56
Total	1,090	45,800	9,370	370,000	39.46	8,410
Concentrates	192	4,670	793	22,400	28.26	770
Coarse ores	--	--	21	710	34.21	4
Fine ores	365	12,300	3,590	103,000	28.80	2,140
Pellets	522	28,600	4,890	240,000	49.13 <sup>5</sup>	5,400
Briquettes	--	--	--	--	--	56
Other agglomerates	3	65	70	2,730	38.98	30
Roasted pyrites	3	117	7	274	38.11	4
Total	1,090	45,800	9,370	370,000	39.46	8,410

-- Zero.

<sup>1</sup>Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes agglomerates.

<sup>3</sup>Customs value. Excludes international freight and insurance charges.

<sup>4</sup>Less than ½ unit.

<sup>5</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 7  
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN SEPTEMBER 2005<sup>1,2</sup>  
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Country of origin	Type of product						Total
	Concentrates	Coarse ores	Fine ores	Pellets	Briquettes and other agglomerates	Roasted pyrites	
Australia	--	--	1	--	--	--	1
Brazil	--	--	245	--	--	--	245
Canada	176	--	120	522	--	--	818
Finland	--	--	--	--	--	3	3
Mexico	--	--	--	--	3	--	3
Sweden	16	--	--	--	--	--	16
Total	192	--	365	522	3	3	1,090

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes agglomerates.

Source: U.S. Census Bureau.

TABLE 8  
U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY COUNTRY<sup>1</sup>

Country of origin	2005					2004
	September		Year to date			January-September
	Thousand metric tons	Value <sup>2</sup> (thousand dollars)	Thousand metric tons	Value <sup>2</sup> (thousand dollars)	Value <sup>2</sup> (dollars per ton)	Thousand metric tons
Brazil	--	--	1,510	79,300	52.46	2,000
Canada	522	28,600	3,280	152,000	46.48	3,400
Russia	--	--	99	8,550	86.00 <sup>3</sup>	--
Total	522	28,600	4,890	240,000	49.13	5,400

-- Zero.

<sup>1</sup>Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Customs value. Excludes international freight and insurance charges.

<sup>3</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 9  
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE,  
BY CUSTOMS DISTRICT<sup>1,2</sup>  
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Customs district (code no.)	September	January-September	
	2005	2005	2004
Baltimore, MD (13)	285	2,500	2,730
Buffalo, NY (09)	--	6	5
Charleston, SC (16)	--	1	(3)
Chicago, IL (39)	402	1,090	879
Cleveland, OH (41)	350	2,060	1,770
Detroit, MI (38)	26	180	123
Great Falls, MT (33)	--	(3)	(3)
Houston-Galveston, TX (53)	--	36	52
Los Angeles, CA (27)	--	(3)	--
Mobile, AL (19)	--	63	80
New Orleans, LA (20)	--	3,400	2,720
New York City, NY (10)	1	1	--
Nogales, AZ (26)	3	14	(3)
Ogdensburg, NY (07)	--	(3)	--
Philadelphia, PA (11)	19	22	55
San Francisco, CA (28)	--	4	--
San Juan, PR (49)	--	6	--
Total	1,090	9,370	8,410

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes agglomerates.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 10  
U.S. IMPORTS FOR CONSUMPTION OF PELLETS,  
BY CUSTOMS DISTRICT<sup>1</sup>

(Thousand metric tons)

Customs district (code no.)	September	January-September	
	2005	2005	2004
Baltimore, MD (13)	147	1,090	1,060
Chicago, IL (39)	--	53	196
Cleveland, OH (41)	350	2,060	1,730
Detroit, MI (38)	26	180	123
Houston-Galveston, TX (53)	--	36	52
Mobile, AL (19)	--	61	--
New Orleans, LA (20)	--	1,410	2,230
Total	522	4,890	5,400

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.